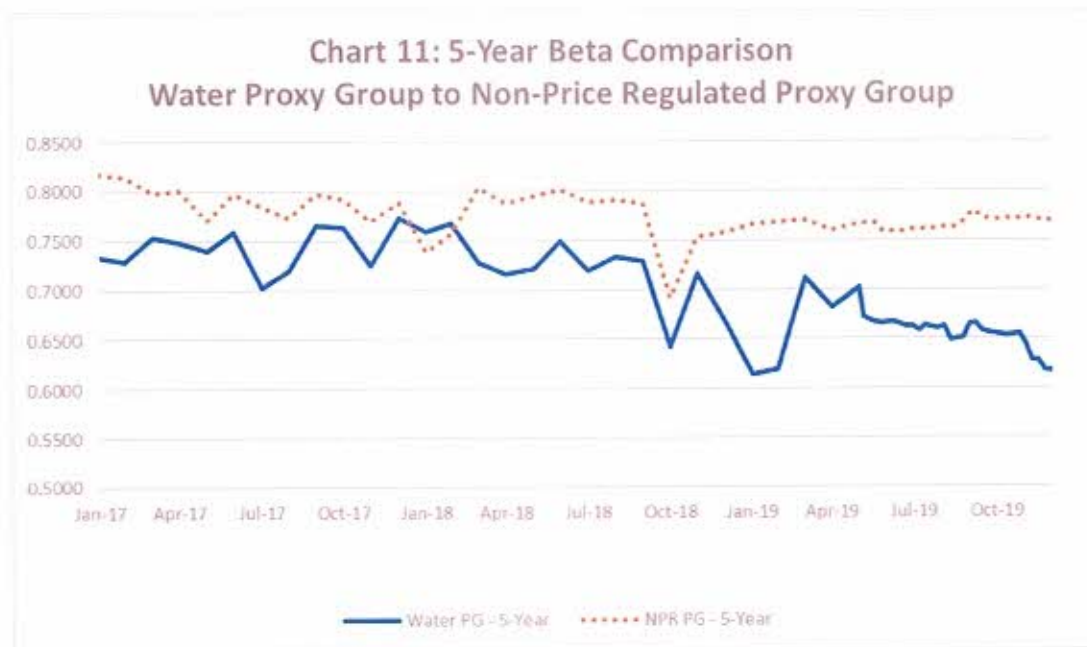
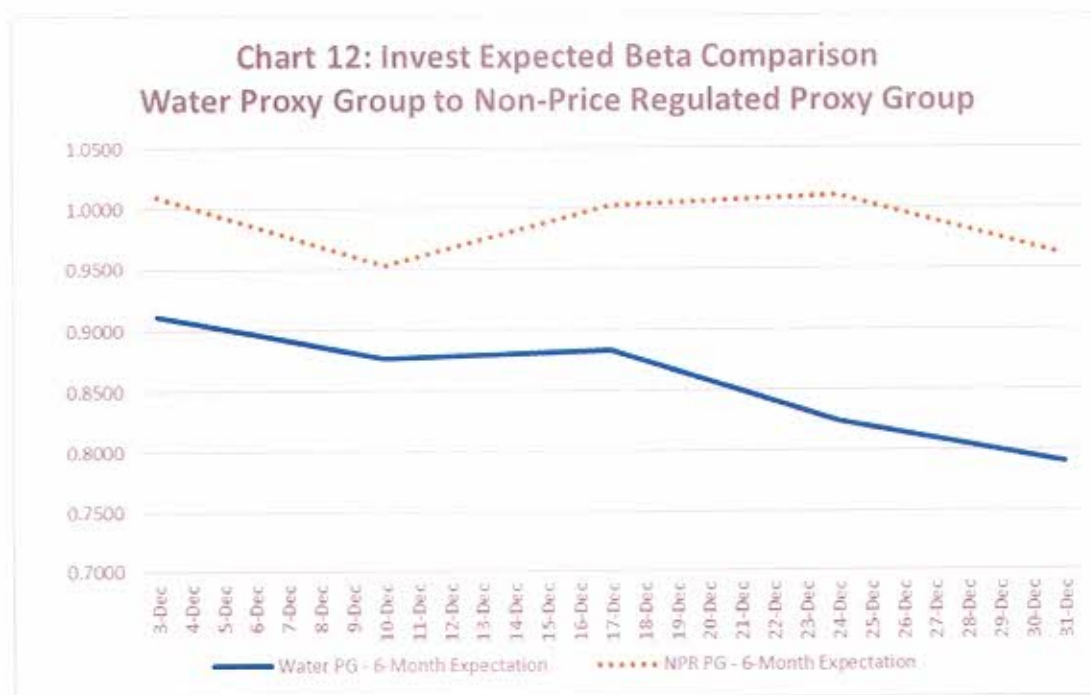


Even beta coefficients calculated based on 5-year returns indicate that betas for the companies in his Non-Price Regulated Proxy Group are currently about 20% higher, as shown in Chart 11 below. The 5-year betas for the two groups overlapped for a brief period in late 2017 to early 2018, but as Chart 11 clearly shows, that was an exception and the Non-Price Regulated Proxy Group has shown considerably higher betas throughout the 3 years of betas analyzed, with the gap only getting larger in the last 6 months.



Charts 9-11cm show betas calculated based on historical returns. Investors may or may not expect the future to be like the past. As explained above, the authorized ROE for BGWC should be based on investor expectations. Historical data is relevant only to the degree it represents investors' current expectations. In addition to historical betas, I also calculated "forward-looking" betas based on current market prices of stock options<sup>54</sup> (put and call options traded on the 14 companies in Mr. D'Ascendis' Non-Price Regulated Proxy Group) in order to determine the level of risk expected by investors for both proxy groups in the future. As shown in Chart 12 below, throughout December 2019 investors expected (6-months forward) the beta of Mr. D'Ascendis' Non-Price Regulated Proxy Group to remain about 20% higher than the utilities group in the future

<sup>54</sup> See Section V. E for a definition of stock options.



The results of my analysis presented above indicate that Mr. D'Ascendis' Non-Price Regulated Proxy Group has and is expected by investors to continue to have significantly higher risk than water utilities, based on his own criteria (beta coefficients), and therefore should not be used to determine the appropriate authorized ROE for BGWC in this proceeding.

**Q. IS MR. D'ASCENDIS' DCF RESULT OF 9.03% AN APPROPRIATE COST OF EQUITY FOR BGWC?**

**A.** No. Mr. D'Ascendis' 9.03% DCF result, as applied to his proxy group of 6 water utility companies, is relatively close to the market based cost of equity because his DCF analysis relies on a 7.00%<sup>55</sup> growth component. Below I will explain why the analyst five-year EPS

<sup>55</sup> Ibid. Schedule DWD-1, page 1 of 7. 7.00% = average of Five Year Growth in EPS shown in column "[6]".

1 growth rate forecasts used by Mr. D'Ascendis' are usually not consistent with sustainable  
2 growth rates and lead to above market cost of equity results most of the time. Currently  
3 his growth rates are reasonable and therefore his 9.03% DCF result is on the high side of  
4 reasonable for setting rates in this proceeding.

5  
6 **DCF Method**

7 **Q. WHAT FORM OF THE DCF MODEL DOES MR. D'ASCENDIS USE?**

8 **A.** He uses the single stage (or constant growth) form of the DCF model.<sup>56</sup>

9 **Q. DOES MR. D'ASCENDIS PROPERLY APPLY THE SIMPLIFIED OR**  
10 **CONSTANT DCF METHOD?**

11 **A.** No. Mr. D'Ascendis adds a growth component to a divided yield even though his growth  
12 analysis relies completely on analyst five-year EPS per share growth forecasts.<sup>57</sup> It is only  
13 a DCF method if the dividend yield is computed properly, and the growth rate used is  
14 derived from a careful study of what future sustainable growth in cash flow is anticipated  
15 by investors. In BGWC's 2017 rate case (Docket No. 2017-292-WS) this Commission  
16 concluded "Mr. D'Ascendis' use of analysts' estimates for his DCF analysis is  
17 supported by consensus..."<sup>58</sup> Respectfully, I believe this Commission's level of support  
18 for Mr. D'Ascendis' DCF method may have been too generous. As discussed above  
19 (Section II), major financial institutions (J.P. Morgan Chase) do not use a growth rate based  
20 on analyst 5-year EPS growth rates as Mr. D'Ascendis has done.

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<sup>56</sup> Ibid, page 14, lines 11-12.

<sup>57</sup> Ibid, page 15, lines 17-18.

<sup>58</sup> Page 14.

1 **Q. HOW DID MR. D'ASCENDIS CALCULATE HIS GROWTH RATE FOR HIS**  
2 **DCF METHOD?**

3 **A.** On page 15, lines 12-14 of Mr. D'Ascendis' testimony he says that he uses analysts' five-  
4 year EPS forecast as the growth component of his DCF analysis because "investors are  
5 likely to rely on... Value Line, Reuters, Zacks, and Yahoo Finance" and "Investors realize  
6 that analysts have significant insight..."

7 Below are the five-year projected earnings per share rates by the four investment  
8 research firms he chose:

9 Value Line:	8.50%
10 Reuters:	10.60%
11 Zacks:	8.70%
12 Yahoo Finance:	5.93% <sup>59</sup>

13 **Q. IS MR. D'ASCENDIS' METHODOLOGY TO DETERMINE THE GROWTH**  
14 **RATE TO USE IN HIS DCF MODEL APPROPRIATE?**

15 **A.** No. As stated above, Mr. D'Ascendis uses analyst five-year earnings per share growth  
16 without attempting to reconcile the retention rate used for computing growth with the  
17 retention rate he used to compute the dividend yield. This is analogous to failing to  
18 reconcile the money you are taking out of your checking account with your future balance,  
19 i.e. the basic balancing of a checkbook.  
20

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<sup>59</sup> Ibid. Schedule DWD-3, page 1 of 7.

1   **Q.     CAN YOU PLEASE SUMMARIZE WHY A FUTURE ORIENTED “B X R”**  
2       **METHOD IS SUPERIOR TO A FIVE-YEAR EARNINGS PER SHARE**  
3       **GROWTH RATE FORECAST IN PROVIDING A LONG-TERM SUSTAINABLE**  
4       **GROWTH RATE?**

5   **A.**   Yes. The primary cause of sustainable earnings growth is the retention of earnings. A  
6       company is able to create higher future earnings by retaining a portion of the prior year's  
7       earnings in the business and purchasing new business assets with those retained earnings.  
8       There are many factors that can cause short-term swings in earnings growth rates, but long-  
9       term sustainable growth is caused by retaining earnings and reinvesting those earnings.  
10      Factors that cause short-term swings include anything that causes a company to earn a  
11      return on book equity at a rate different from the long-term sustainable rate. Assume, for  
12      example, that a particular utility company is regulated so that it is provided with a  
13      reasonable opportunity to earn 9.0% on its equity. Should the company experience an event  
14      such as the loss of several key customers, or unfavorable weather conditions, which cause  
15      it to earn only 6.0% on equity in a given year, the drop of 9% earned return on equity to a  
16      6% earned return on equity would be concurrent with a very large drop in earnings per  
17      share. In fact, if a company did not issue any new shares of stock during the year, a drop  
18      from a 9% earned return on book equity to a 6% earned return on book equity would result  
19      in a 33.3% decline in earnings per share over the period.<sup>60</sup> However, such a drop in earnings  
20      would not be any indication of what is a long-term sustainable earnings per share growth

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<sup>60</sup> By definition, earned return on equity is earnings divided by book value. Therefore, whatever level of earnings is required to produce earnings of 6% of book would have to be 33.3% lower than the level of earnings required to produce a return on book equity of 9%.

1 rate. If the drop were caused by weather conditions, the drop in earnings would be  
2 immediately offset once normal weather conditions return. If the drop were from the loss  
3 of some key customers, the company would replace the lost earnings by filing for a rate  
4 increase to bring revenues up to the level required for the company to have a reasonable  
5 opportunity to recover its cost of equity.

6 For the above reasons, changes in earnings per share growth rates that are caused  
7 by non-recurring changes in the earned return on book equity are inconsistent with long-  
8 term sustainable growth, but changes in earnings per share because of the reinvestment of  
9 additional assets is a cause of sustainable earnings growth. The " $b \times r$ " term in the DCF  
10 equation computes sustainable growth because it measures only the growth which a  
11 company can expect to achieve when its earned return on book equity " $r$ " remains in  
12 equilibrium. If analysts have sufficient data to be able to forecast varying values of " $r$ " in  
13 future years, then a complex, or multi-stage DCF method must be used to accurately  
14 quantify the effect. Averaging growth rates over sub-periods, such as averaging growth  
15 over the first five years with a growth rate expected over the subsequent period, will not  
16 provide an appropriate representation of the cash flows expected by investors in the future  
17 and, therefore, will not provide an acceptable method of quantifying the cost of equity  
18 using the DCF method. The choices are either a constant growth DCF, in which one " $b \times$   
19  $r$ " derived growth rate should be used, or a complex DCF method in which the cash flow  
20 anticipated in each future year is separately estimated. Mr. D'Ascendis has done neither.

1 **Q. WHY ARE ANALYSTS' FIVE-YEAR CONSENSUS GROWTH RATES NOT**  
2 **INDICATIVE OF LONG-TERM SUSTAINABLE GROWTH RATES?**

3 **A.** Analysts' five-year earnings per share growth rates are earnings per share growth rates that  
4 measure earnings growth from the most currently completed fiscal year to projected  
5 earnings five years into the future. These growth rates are not indicative of future  
6 sustainable growth rates, in part, because the sources of cash flow to an investor are  
7 dividends and stock price appreciation. While both stock price and dividends are impacted  
8 in the long-run by the level of earnings a company is capable of achieving, earnings growth  
9 over a period as short as five years is rarely in synchronization with the cash flow growth  
10 from increases in dividends and stock prices. For example, if a company experiences a year  
11 in which investors perceive that earnings temporarily dipped below normal trend levels,  
12 stock prices generally do not decline at the same percentage that earnings decline, and  
13 dividends are usually not cut just because of a temporary decline in a company's earnings.  
14 Unless both the stock price and dividends mirror every down swing in earnings, they cannot  
15 be expected to recover at the same growth rate that earnings recover. Therefore, growth  
16 rates such as five-year projected growth in earnings per share are not indicative of long-  
17 term sustainable growth rates in cash flow. As a result, they are inapplicable for direct use  
18 in the simplified DCF method.

19 **Q. IS THE USE OF FIVE-YEAR EARNINGS PER SHARE GROWTH RATES IN**  
20 **THE DCF MODEL ALSO IMPROPER?**

21 **A.** Yes. A raw, unadjusted, five-year earnings per share growth rate is usually a poor proxy  
22 for either short-term or long-term cash flow that an investor expects to receive. When  
23 implementing the DCF method, the time value of money is considered by equating the

1 current stock price of a company to present value of the future cash flows that an investor  
2 expects to receive over the entire time that he or she owns the stock. The discount rate  
3 required to make the future cash flow stream, on a net present value basis, equal to the  
4 current stock price is the cost of equity. The only two sources of cash flow to an investor  
5 are dividends and the net proceeds from the sale of stock at whatever time in the future the  
6 investor finally sells. Therefore, the DCF method is discounting future cash follows that  
7 investors expect to receive from dividends and from the eventual sale of the stock. Five-  
8 year earnings growth rate forecasts are especially poor indicators of cash flow growth even  
9 over the five years being measured by the five-year earnings per share growth rate number.

10 **Q. WHY IS A FIVE-YEAR EARNINGS PER SHARE GROWTH RATE A POOR**  
11 **INDICATOR OF THE FIVE-YEAR CASH FLOW EXPECTATION FROM**  
12 **DIVIDENDS?**

13 **A.** The board of directors' changes dividend rates based upon long-term earnings expectations  
14 combined with the capital needs of a company. Most companies do not cut the dividend  
15 simply because a company has a year in which earnings were below sustainable trends, and  
16 similarly they do not increase dividends simply because earnings for one year happened to  
17 be above long-term sustainable trends. Therefore, over any given five-year period, earnings  
18 growth is frequently very different from dividend growth. In order for earnings growth to  
19 equal dividend growth, at a minimum, earnings per share in the first year of the five-year  
20 earnings growth rate period would have to be exactly on the long-term earnings trend line  
21 expected by investors. Since earnings in most years are above or below the trend line, the  
22 earnings per share growth rate over most five-year periods is different from what is  
23 expected for dividend growth.

1 **Q. WHY IS THE FIVE-YEAR EARNINGS PER SHARE GROWTH RATE A POOR**  
2 **INDICATION OF FUTURE STOCK PRICE GROWTH?**

3 **A.** If a company happens to experience a year in which earnings decline below what investors  
4 believe are consistent with the long-term trend, then the stock price does not drop as much  
5 as earnings drop. Similarly, if a company happens to experience a year in which earnings  
6 are higher than the investor-perceived long-term sustainable trend, then the stock price will  
7 not increase as much as earnings. In other words, the P/E ratio of a company will increase  
8 after a year in which investors believe earnings are below sustainable levels, and the P/E  
9 ratio will decline in a year in which investors believe earnings are higher than expected.  
10 Since it is stock price that is one of the important cash flow sources to an investor, a five-  
11 year earnings growth rate is a poor indicator of cash flow both because it is a poor indicator  
12 of stock price growth over the five years being examined and is equally a poor predictor of  
13 dividend growth over the same period.

14 **Q. ARE YOU SAYING THAT ANALYSTS' CONSENSUS EARNINGS PER SHARE**  
15 **GROWTH RATES ARE USELESS AS AN AID TO PROJECTING THE**  
16 **FUTURE?**

17 **A.** No. Analysts' EPS growth rates are, however, very dangerous if used in a simplified DCF  
18 without proper interpretation. While they are not useful if used in their "raw" form, they  
19 can be useful in computing estimates of what earned return on equity investors expect will  
20 be sustained in the future, and as such, are useful in developing long-term sustainable  
21 growth rates.  
22  
23

**Risk Premium Method**

**Q. PLEASE EXPLAIN MR. D'ASCENDIS' VERSION OF THE RISK PREMIUM METHODS, AS PRESENTED IN HIS DIRECT TESTIMONY.**

**A.** Mr. D'Ascendis applies the following two risk premium methods: Predictive Risk Premium Model (PRPM) and "total market approach."<sup>61</sup> His PRPM is based on research showing that the level of volatility in equity prices and returns can be used to predict future levels of risk premiums.<sup>62</sup> The model inputs include historical returns of the common equity of the companies in his "Utility Proxy Group" minus the historical monthly yield on long-term U.S. Treasury securities through July 2019.<sup>63</sup> Statistical software was used to determine the projected equity risk premium for each of the water companies in Mr. D'Ascendis' Utility Proxy Group, which range between 10.21% for California Water Service Group to 12.64% for York Water.<sup>64</sup> The risk-free rate component of 2.91% is based on the consensus forecast derived from Blue Chip Financial Forecasts.<sup>65</sup> Adding the predicted risk premium to the risk free rate for each of the 6 companies in his proxy group results in a PRPM based 10.97% cost of equity.<sup>66</sup>

Mr. D'Ascendis' total market approach RPM adds a prospective public utility bond yield to an equity risk premium.<sup>67</sup> The equity risk premium is based on beta-adjusted total

<sup>61</sup>Ibid. page 16, lines 1-12.

<sup>62</sup> Ibid. lines 5-12.

<sup>63</sup> Ibid. page 17, lines 17-19.

<sup>64</sup> Ibid. Schedule DWD-4, page 2 of 12.

<sup>65</sup> Ibid. Schedule DWD-5, page 2 of 2, note 2.

<sup>66</sup> Ibid. Schedule DWD-4, page 2 of 12.

<sup>67</sup> Ibid. page 18, lines 14-16.

1 market equity risk premium and an equity risk premium based upon S&P Utilities Index.<sup>68</sup>  
2 He determines the prospective bond yield based on the consensus forecasts of about 50  
3 economists of Aaa rated corporate bonds (3.90%) and then increases this result by 0.37%  
4 to be equivalent to A2 rated public utility bonds (4.27%).<sup>69</sup> He adds an additional 0.08%  
5 to the prospective bond yield to get a 4.35% “expected bond yield for his Utility Proxy  
6 Group”<sup>70</sup> because his Utility Proxy Group has a lower A2/A3 bond rating.<sup>71</sup> He calculated  
7 equity risk premium of 5.45% based on the average of the following two approaches:

8 Beta approach: 5.91%

9 Average of Ibbotson historical risk premiums (5.54%), regression on  
10 Ibbotson risk premium data (8.35%), Ibbotson equity risk premium based  
11 on PRPM (9.05%), market return projects from Value Line (9.73%,  
12 10.62%) and Bloomberg (10.48%) applied to the adjusted beta (0.66) of his  
13 Utility Proxy Group.<sup>72</sup>

14 S&P Utility Index and Moody’s A-rated public utility bonds: 4.98%

15 Average of historical risk premiums (4.00%), regression on historical equity  
16 risk premium (6.04%) and forecasted equity risk premiums (6.24% and  
17 4.83%).

18 Adding this 5.45% equity risk premium to the risk-free rate for each of the 6 companies in  
19 his proxy group results in a RPM based 9.80% cost of equity.<sup>73</sup>

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<sup>68</sup> Ibid.

<sup>69</sup> Ibid. page 19, lines 1-15.

<sup>70</sup> Ibid. page 19, lines 16-20 and page 20, lines 1-2.

<sup>71</sup> Ibid.

<sup>72</sup> Ibid. Schedule DWD-4, page 8 of 12.

<sup>73</sup> Ibid. Schedule DWD-4, page 3 of 12.

Mr. D'Ascendis used the average (10.39%) of the two risk premium results as support for his cost of equity recommendation.<sup>74</sup>

**Q. PLEASE COMMENT ON MR. D'ASCENDIS' RISK PREMIUM METHODS.**

Mr. D'Ascendis' RPM results are too high (above rates indicated by market data) primarily because his overall market result expectations are above. The market expects less than a 32% probability of growth in the S&P 500 will provide a market return of 10.55%<sup>75</sup>. Investors expect a return of 11.62%<sup>76</sup> and 14.52%<sup>77</sup>, as proposed by Mr. D'Ascendis to be even more unlikely. Therefore, Mr. D'Ascendis' RPM results are unreliable and significantly overstate BGWC's cost of equity

**CAPM Method**

**Q. PLEASE SUMMARIZE MR. D'ASCENDIS' CAPM METHOD.**

Mr. D'Ascendis explains that, "The model is applied by adding a risk-free rate of return to a market risk premium, which is adjusted proportionally to reflect the systematic risk of the individual security relative to the total market as measured by the beta coefficient."<sup>78</sup>

The traditional CAPM model is expressed as:

$R_s = R_f + \beta(R_m - R_f)$ ...Where:

$R$  = Return rate on the common stock

$R_f$  = Risk-free rate of return

$R_m$  = Return rate on the market as a whole

$\beta$  = adjusted beta (volatility of the security relative to the market

<sup>74</sup> Ibid. pages 26, lines 1-5.

<sup>75</sup> Exhibit ALR 5, page 3.

<sup>76</sup> D'Ascendis Direct Testimony, page 20, lines 20-21.

<sup>77</sup> Ibid. page 23, line 13.

<sup>78</sup> D'Ascendis Direct Testimony, page 26, lines 16-19.

as a whole)" <sup>79</sup>

He uses a risk-free rate of 2.91% based on the Blue Chip consensus forecast of 30-Year U.S. Treasury bond yields.<sup>80</sup> The risk premium portion of his CAPM analysis (shown on Schedule DWD-5, Page 2 of 2) is 10.03%<sup>81</sup> which is derived from an average of the following components:

- Historical: 8.80% (Ave of Measure 1, 2 and 3);

Measure 1: 6.77%

The arithmetic mean monthly returns of large company stocks relative to long-term U.S. Treasury bond yields from 1926-2018;

Measure 2: 9.42%

Regression analysis applied to Ibbotson historical data (1926-2018);

Measure 3: 10.2%

Application of PRPM<sup>82</sup> to historical data (1926-2018).

- Value Line Projected: 11.20% (Ave of Measure 4 and 5);

Measure 4: 10.72%

Value Line projected return on market (13.63%)<sup>83</sup> – Projected Risk Free Rate (2.91%).

Measure 5: 11.61%

Value Line projected return on S&P 500 (14.52%) – Projected Risk Free Rate (2.91%).

<sup>79</sup> Ibid. page 26, line 19 and page 27, lines 1-6.

<sup>80</sup> Ibid. page 30, lines 3-8.

<sup>81</sup> Ibid. Schedule DWD-5, page 2 of 2.

<sup>82</sup> See description of Mr. D'Ascendis' PRPM in my critique of his Risk Premium Method above.

<sup>83</sup> 3-5 years hence.

- Bloomberg Projected MRP: 11.47% (Measure 6);

Bloomberg projected return on S&P 500 (14.38%) – Projected Risk Free Rate (2.91%).

**Q. PLEASE SUMMARIZE MR. D'ASCENDIS' ECAPM METHOD.**

**A.** Mr. D'Ascendis' ECAPM is based on a security market<sup>84</sup> line that is not as steeply sloped as described by the CAPM formula.<sup>85</sup> The revised security market line used in his ECAPM results in higher cost of equity (10.34%) results for water utility companies than his "traditional CAPM" (9.47%).<sup>86</sup>

**Q. DO YOU AGREE WITH THE RESULTS OF MR. D'ASCENDIS' CAPM AND ECAPM ANALYSES?**

**A.** No, I do not agree with results of either of Mr. D'Ascendis' CAPM analyses because I believe that they significantly and inaccurately overstate the Company's cost of equity. The arithmetic average return that Mr. D'Ascendis uses overstates the historical risk premium by 300 basis points. Mr. D'Ascendis used the arithmetic mean returns of 11.89% for large company stocks between 1926 and 2018.<sup>87</sup> The 2019 SBBI Yearbook shows that investors actually earned a compounded annual return of 10.0%<sup>88</sup> between 1926 and 2018. The arithmetic mean return of 11.89%<sup>89</sup> is possibly valuable to stock brokers and fund managers attempting to predict future bonuses, but not for calculating the cost of equity. A Dow Jones Newswire article stated, "Some financial advisers rely too heavily on a formula

<sup>84</sup> The security market line is systematic risk, as measured by beta, plotted against expected return of the market.

<sup>85</sup> D'Ascendis Direct Testimony, Schedule DWD-5, page 1 of 2.

<sup>86</sup> Ibid. Schedule DWD-5, page 1 of 2.

<sup>87</sup> D'Ascendis Direct Testimony, DWD-5, Page 2 of 2.

<sup>88</sup> 2019 SBBI Yearbook, page 2-3.

<sup>89</sup> D'Ascendis Direct Testimony, Schedule DWD-5, Page 2 of 2.

1 known as the arithmetic average, which can be misleading when investing for the long  
2 term. Financial advisors who use this formula may be overstating your potential profit and  
3 leading you to take risks you might otherwise avoid...”<sup>90</sup>

4 As discussed in Section V. E of this testimony, stock options traded on the S&P  
5 500 indicate that a market risk premium of between 8% and 9% is conservatively high. The  
6 market expects less than a 32% probability of growth in the S&P 500 that would result in  
7 a risk premium of between 8% and 9%. Investors expect a growth rate equivalent to a  
8 10.03%<sup>91</sup> market risk premium to be even more unlikely. Therefore, Mr. D’Ascendis’  
9 CAPM results are unreliable and significantly overstate BGWC’s cost of equity based on  
10 market data.

11 **MR. D’ASCENDIS’ RISK ADJUSTMENT**

12 **Q. IS MR. D’ASCENDIS’ ADDER FOR A SMALL SIZE EFFECT AN**  
13 **APPROPRIATE PART OF A COST OF EQUITY ANALYSIS FOR A PUBLIC**  
14 **UTILITY?**

15 **A.** No. Mr. D’Ascendis’ 0.50% premium adder for the small size of BGWC relative to the  
16 average capitalization of the Water Proxy Group is not justifiable. Mr. D’Ascendis states  
17 that “size has a bearing on business risk”<sup>92</sup> because they are “less able to cope with  
18 significant events that affect sales, revenues, and earnings”<sup>93</sup>  
19

<sup>90</sup> Kaja Whitehouse, To Financial Advisors and Fuzzy Math, Dow Jones Newswires October 8, 2003.

<sup>91</sup> D’Ascendis Direct Testimony, Schedule DWD-5, Page 2 of 2.

<sup>92</sup> Mr. D’Ascendis’ Direct Testimony, page 38, lines 12-19.

<sup>93</sup> Ibid.

1 **Q. IS THERE UNIVERSAL AGREEMENT THAT SMALLER COMPANIES HAVE**  
2 **A HIGHER COST OF EQUITY?**

3 A. No. *The Principles of Corporate Finance* stated that the so called “small firm” was most  
4 likely supported by “data mining”. The textbook goes on to say that if you search enough  
5 you are likely to find pattern. Professor Aswath Damodaran from New York University  
6 states the following regarding the supposed “small cap premium”:

7 Even if you believe that small cap companies are more exposed to market risk than  
8 large cap ones, this is an extremely sloppy and lazy way of dealing with that risk,  
9 since risk ultimately has to come from something fundamental (and size is not a  
10 fundamental factor).<sup>94</sup>  
11

12 Mr. D’Ascendis claims that BGWC’s recent reorganization was completed so that  
13 the Company had access to additional resources including management expertise, sharing  
14 business functions and increase access to financing. At a minimum, BGWC’s recent  
15 reorganization indicates that its business risk has declined since its last rate case and  
16 therefor its cost of capital has decreased as well.

17 Mr. D’Ascendis recommendation that BGWC’s cost of equity should be increased  
18 by 0.50%<sup>95</sup> to account for its size is likely excessive. With that said, my 8.72% cost of  
19 equity recommendation is on the high end of results to account for the possibly that  
20 BGWC’s small size impacts the return expectations required by investors and their market-  
21 based cost of equity.  
22

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<sup>94</sup>Aswath Damodaran, *Equity Risk Premiums (ERP): Determinates, Estimation and Implications – The 2015 Edition* (paper updated, March 2015). Page 42.

<sup>95</sup>D’Ascendis Direct Testimony, page 36, lines 27-28.

## VII. CONCLUSION

**Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS IN THIS CASE.**

**A.** Based on the evidence presented in my testimony I conclude that the cost of equity allowed for the Company should be 8.72% with an overall cost of capital of 7.18% (See Table 1) based on the average common equity ratio of the Water Proxy Group. My cost of equity recommendation is based upon my applying my three cost of equity models (Constant Growth DCF, Non-Constant Growth DCF, CAPM) to a proxy group of 6 regulated utility companies. My 8.75% cost of equity recommendation satisfies the requirements of *Hope* and *Bluefield* that regulated utility companies should have opportunity to earn a return commensurate with returns on investments in other enterprises having corresponding risks.

Mr. D'Ascendis' cost of equity recommendation of 10.20%-10.70% is unreasonably high primarily because it is based, in part, on model results applied to a group of 14 companies (Non-Price Regulated Proxy Group) that are riskier than water utilities. Additionally, the equity risk premium he uses in his RPM and CAPM are higher than appropriate. His Constant Growth DCF produces a result of 9.03% which on the high side of reasonable, but closer to the market-based cost of equity than any of his other methods. My recommendations are consistent with legal standards set by the United States Supreme Court and market data. My 8.72% cost of equity and an overall cost of capital (rate of return) of 7.18% will allow BGWC to raise capital on reasonable terms while fulfilling their obligation to provide safe and reliable service.

1    **Q.       DOES THIS CONCLUDE YOUR TESTIMONY?**

2    **A.       Yes.**

3